

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

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**THE PROCTER & GAMBLE COMPANY,**

**Plaintiff,**

**v.**

**ULTREO, INC.,**

**Defendant.**  
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Civil Action No. 07-Civ-8379 (RJS)

**DECLARATION OF YORAM (JERRY) WIND**

I, Yoram (Jerry) Wind, declare under penalty of perjury that the foregoing is true and correct.

**I. Objectives**

1. I was asked by counsel to the defendant to evaluate the study and October 9, 2007 declaration of Thomas D. Dupont in support of The Procter & Gamble Company's ("P&G") Motion for Preliminary Injunction.

**II. Qualifications**

2. I am the Lauder Professor and Professor of Marketing at the Wharton School of the University of Pennsylvania. I joined the Wharton staff in 1967, upon receipt of my doctorate from Stanford University.

(a) Publications – I have been a regular contributor to the marketing field<sup>1</sup>, including 20 books and over 250 papers, articles and monographs. My books and articles, which are frequently cited by other authors, encompass marketing strategy, marketing research, new product and market development, consumer and organizational buying behavior, and global marketing strategy.

<sup>1</sup> Marketing, according to the American Marketing Association, is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational goals. (P.D. Bennet ed. Dictionary of Marketing Terms, Chicago AMA 1988, p. 54)

(b) Editorships – I have served as the editor-in-chief of the *Journal of Marketing*, as a guest editor of numerous marketing journals, on the policy boards of the *Journal of Consumer Research* and *Marketing Science*, and have been on the editorial boards of the major marketing journals. I am currently the founding editor of Wharton School Publishing.

(c) Teaching and Consulting – I have taught MBA, Ph.D. and executive development courses on a wide range of marketing topics. I also have consulted extensively for many Fortune 500 firms, including major consumer goods and pharmaceutical firms. In both my teaching and consulting I have designed, conducted and evaluated numerous marketing and consumer research studies.

(d) Expert Witness – I have conducted and evaluated marketing and consumer research in litigation context, have been qualified as a marketing and survey research expert and have testified in trial in a number of Federal courts.

(e) Awards – I have received various awards, including the four major marketing awards – The Charles Coolidge Parlin Award (1985), the AMA/Irwin Distinguished Educator Award (1993), the Paul D. Converse Award (1996), and MIT's Buck Weaver Award (2007). I also received the first Faculty Impact Award by Wharton Alumni (1993). I was elected to the Attitude Research Hall of Fame in 1984. I have also been honored with a number of research awards, included two Alpha Kappa Psi Foundation awards. In 2001, I was selected as one of the ten grand Auteurs in Marketing and in 2003 as the recipient of the Elsevier Science Distinguished Scholar Award of the Society for Marketing Advances.

(f) Complete Resume and Compensation – My resume is attached to this declaration as Appendix A. It includes a list of my publications (pages 3-21) and cases in which I have testified as an expert (pages 27-30). My total compensation for review and analysis of the

relevant material and preparation of this expert report is based on my regular consulting rate (of \$1,000 an hour).

### III. Criteria for Evaluation and Conclusions

3. Approach and criteria for evaluation. In preparing this declaration, I reviewed Dr. Dupont's October 9, 2007 declaration and enclosed study, as well as his deposition. In evaluating the soundness and appropriateness of the research methodology, I relied on the standards employed in marketing and consumer research (a) as reflected in the professional literature and as taught by me and others at Wharton and other leading universities; (b) as practiced by me and other leading professionals in conducting and evaluating marketing and consumer research; for academic peer reviewed publications, and for management and courts as input to their decisions; and (c) as required by the Manual for Complex Litigation. The specific criteria outlined in the Manual for Complex Litigation (Section 11.493 page 103), are consistent with the professional marketing research literature.<sup>2</sup>

#### 4. Summary Assessment of the Study on Key Criteria.

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|----|---|-----------------------------|
| a) | Did the study have the necessary control group?                 | <b>No.</b><br>(Paragraph 6) |
| b) | Were the control questions appropriate?                         | <b>No.</b><br>(Paragraph 7) |
| c) | Was the test stimulus the actual ad/website                     | <b>No.</b><br>(Paragraph 8) |
| d) | Were the questions asked unbiased and unbiased and not leading? | <b>No.</b><br>(Paragraph 9) |

<sup>2</sup> See for example marketing research texts such as: Aaker, David A., V. Kumar and George S. Day, *Marketing Research* (Eighth Edition), 2004, Wiley, New York.; Churchill, Jr., Gilbert A. and Dawn Iacobucci, *Marketing Research: Methodological Foundations* (9th ed.), 2005, Fort Worth, TX: Harcourt; Green, Paul E. , Donald S. Tull and G. Albaurn *Research for Marketing Decisions* (5th ed.), 1990; Prentice Hall; Lehmann, Gupta and Joel Steckel, *Marketing Research*, 1998, Addison-Wesley; Rosenthal, Robert and Ralph L. Rosnow, *Essentials of Behavioral Research*, 2nd ed., 1991, McGraw-Hill; Shadish, William R., Thomas D. Cook, and Donald T. Campbell, *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*, 2002, Houghton Mifflin Company.

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|----|---|-------------------------------|
| e) | Did the study have the needed open-ended and probing questions? | <b>No.</b><br>(Paragraph 10)  |
| f) | Was the population [universe] properly chosen and defined?      | <b>No.</b><br>(Paragraph 11)  |
| g) | Was the sample chosen representative of the population?         | <b>Not clear</b> <sup>3</sup> |
| h) | Were the data analyzed correctly?                               | <b>No.</b><br>(Paragraph 12)  |
| i) | Was the study verified?   | <b>No.</b><br>(Paragraph 13)  |
| j) | Can the conclusions be relied on?                               | <b>No.</b><br>(Paragraph 14)  |

5. Conclusions. The research design did not include a control group. This by itself prevents one from relying on the results (Paragraph 6). In addition to this critical issue, other major and disqualifying flaws of the study include inappropriate control questions (Paragraph 7), artificial presentation of the stimuli (Paragraph 8), leading and biased questions (Paragraph 9), omitting critical open-ended questions and the need for probing questions (Paragraph 10), inappropriate universe definition (paragraph 11), inappropriate and biased data analysis (Paragraph 12), inappropriate verification (Paragraph 13) and overall design and execution that does not assure objectivity and does not allow reliance on the conclusions (Paragraph 14). These flaws individually and cumulatively leave no doubt that the study cannot be relied on.

#### **IV. The Major Methodological Flaws of the Study**

6. No control group. This is a fatal flaw. With no control (such as the stimulus without the parts claimed by plaintiff to be deceiving) one has no way of knowing to what extent any advertising for an electric toothbrush would have led to the same level of responses.

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<sup>3</sup> It is not clear from Dr. Dupont's report whether the 694 respondents were selected randomly from the panel, nor how many of them qualified and thus what is the actual response rate. Assuming the 694 respondents were all qualified respondents ( met his universe definition) then the response rate is 37%. This is a relatively low response rate for an Internet panel but one consistent with the 7 to 40% figure presented on the Harris interactive website. [Harris interactive, an interview with our panel expert, David Vaden, response to Q.7 "What is the typical internet response rate?"]

As in medical research in which any new drug is tested against a placebo, this study requires a placebo – a stimulus which would have answered the question of how many respondents would have given similar responses to any advertising for an electric toothbrush with ultrasound, simply based on their prior beliefs about ultrasound.

Without a control, one cannot rely on the results of the study for any purpose. This is illustrated in Figure 1. The use of controls in marketing and consumer research is widely known and is taught at business schools and by all disciplines concerned with establishing causal relationships. All texts and courses in statistics, behavioral science research, marketing research and consumer behavior research emphasize the importance of experimentation and the use of controls. Control experiments are practiced by leading corporations and are critical for any effort of establishing causality.<sup>4</sup>

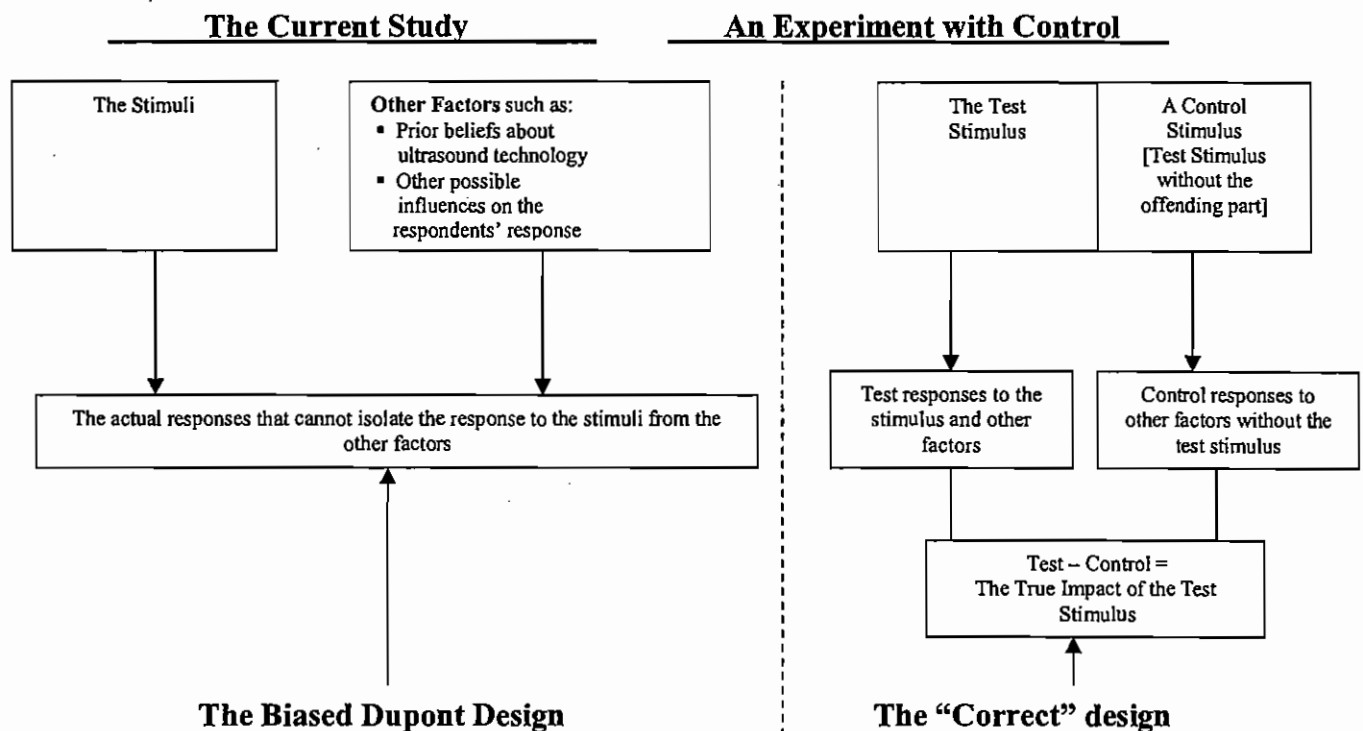
It is important to note that a control question cannot substitute for the need for a control group shown a “placebo” type stimuli, since no control question can capture the prior beliefs of the respondents about ultrasound.

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<sup>4</sup> See for example, the rich marketing research and consumer behavior literature, which stress the importance of experimental designs with controls and provide numerous examples for the use of such studies. See also my paper with David Schmidlein, “Inferring Causality in Consumer Perception Studies in Litigation Context,” Proceedings of the NAD Workshop III Advances in Claim Substantiation, New York BBB, 1991, pp. 161-170.



**Figure 1**  
**The Impact of Not Having a Control**



7. Inappropriate control question. The control questions – “In what you read, do you recall them saying how much an Ultreo toothbrush costs” (Q21) and if yes, “How much did they say Ultreo costs” (Q22) – are inappropriate since it is quite obvious even from a cursory review of the stimulus that cost, which is typically presented by some numerical value and a \$ sign, was not mentioned. A more appropriate control question would have been to ask about some other functional attribute of the product (such as shape, size, etc.). Yet it is important to note that even an important control question does not compensate for the lack of a control group.

8. The test stimulus was not the actual ad/website. The correct test stimulus should have been the actual stimulus as seen by the consumers in the real world. This was not done in this study. The respondents, instead of being shown the actual and, ideally, live ad as part of the Ultreo website [which is dynamic and includes numerous pages] were shown:

- Two screens from the Ultreo website, the homepage and the page accessed when one clicks “Learn More” spread over four screens.

- One of the statements “The result is an incredibly long lasting feeling of clean” was presented in a different type face.
- One of the pages shown was apparently an old version of the website since it is not the one currently on the website. For example, the stimulus presented to the respondent included a section of “Ultreo benefits” the current website describes the section as “The Ultimate Ultrasound Clean™” and has different attributes. Consider for example:

<u>The stimulus that was shown</u>	<u>The current website</u>
• A deep clean -----	Cleaner
• A faster clean -----	Faster
• Naturally whiter teeth -----	Whiter
• Improved gum health -----	Healthier
• A safe and gentle clean -----	Safe & Gentle
• A brushing experience people love -----	People love it
-----	Etc.

- The pages were static and did not allow the normal interactivity one has on Internet websites.

Given the artificial nature of the stimulus, one cannot conclude from this study how consumers would have reacted to the actual live ad on Ultreo’s website.

9. Leading and biased questions. The questionnaire is leading and biased. Consider for example:

(a) The first substantive question is a leading question and not the typical open-ended question as to the main message of the website, such as “What is the major message or messages of the commercial?” “Anything else?”. The question is:

*10. In the box below, please describe how the Ultreo toothbrush works. Please be as specific as you can and include details.*

This question does not allow us to identify the number of respondents who did not take from the website the message that it describes how Ultreo works.

(b) The second substantive question asked was:

11. *Based on what you just saw, do you think the Ultreo toothbrush is different from other power toothbrushes, or not?*

*Yes*

*No*

*Don't know*

12. *[If yes], in what ways is Ultreo different? Please be as specific as you can and include details.*

The correct way of asking this question is whether they think Ultreo is different, similar or don't they know and not the leading focus only on differences.

(c) The third substantive question asked:

13. *In what you read, do you recall them mentioning that Ultreo uses ultrasound technology?*

*Yes*

*No*

*Don't know*

Again leading the respondents, whether they recalled the message re ultrasound technology or not, to focus on ultrasound technology.

(d) The next substantive question was:

14. *[If yes to Q. 13], what does the ultrasound do? Please be as specific as you can and include details.*

Again, this question leads the respondents to focus on ultrasound even if they do not recall at all such a message. And even worse, this question does not focus on the message in the website and thus can be interpreted by the respondent as a general question on "What does ultrasound do?" and not what does the ad say about what does ultrasound do re the Ultreo toothbrush.

(e) The intent question (Q. 20) is not meaningful since it was asked after all the leading questions (10-14) and the questions re benefits (Q. 15, 16) and the "deep feeling of clean" (Q. 17, 18, and 19). To provide valid information this question should have been asked right after an open-ended question on the key message of the stimulus.



10. Unexplained omissions. In addition to the critical omission of a first open-ended question re “what is the major message(s) of the Ad” [Paragraph 8(a) above], Dr. Dupont’s study left out the customary and critical probing questions. Consider for example:

- Not following up Q. 10 with a probe to assess whether the respondents perceived that the impact is of the ultrasound alone (as claimed in the conclusion) or the combination effect of the ultrasound and the brushing activities.
- Not following up Q. 20 with an open-ended question focused on “Why?”.

Such probes are customary and could have provided better insight into consumers' true perceptions of the website.

11. Inappropriate universe definition. The focus on panelists who either use power toothbrushes or are likely to consider buying a power toothbrush in the next year or so is inappropriate for the following reasons: (a) The screening questions did not ask if the respondent is the person who is actually involved in making the buying decision. (b) The intention question instead of asking, as is typically done, about how likely the respondent is to buy the product, focuses on the likelihood to consider buying. Consideration is much weaker than buying. (c) The time horizon is too long. It is well known and accepted that intention-to-buy questions are reliable only if asked for the next few months.

The universe is thus not representative of purchasers or potential purchasers of the product category in question.

12. Biased and inappropriate data analysis. In his conclusions Dr. Dupont states: “...consumers believe that ultrasound itself, or the bubbles activated by ultrasound, are themselves alone able to clean one’s teeth. Many consumers perceived that the ultrasound itself would clean their teeth better than without ultrasound.”<sup>5</sup> To reach this conclusion, Dr. Dupont

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<sup>5</sup> Furthermore, it is not clear where Dr. Dupont got the 72% figure for those who “believed that the ultrasound alone cleaned the teeth or cleaned better.” [Conclusions page 9 of report, second bullet point.]

should have separated the ultrasound/bubbles from the sonic vibrations, yet in his coding, scheme<sup>6</sup>, tables and analysis Dr. Dupont combined the two. See for example the entries in Table 9 of his report.

Table 9 (Dupont report p.22) uses the heading “ultrasound/bubbles clean teeth/cleans better” (Net) and the next level entries are: Ultrasound/bubbles clean teeth (non comparative) (subnet) and ultrasound/bubbles clean better (subnet) most of the entries under the net and subnets combine the ultrasound/bubbles with sonic vibrations. Consider for example:

- Ultrasound/bubbles/sonic vibrations clean teeth/clean thoroughly & effectively/removes food particles
- Ultrasound/bubbles/sonic vibrations remove plaque/tartar/stain (subnet)
  - Ultrasound/bubbles/sonic vibrations reduce/clean/remove plaque
  - Ultrasound/bubbles/sonic vibrations whiten/remove stains
  - Ultrasound/bubbles/sonic vibrations remove tartar
- Ultrasound/bubbles/sonic vibrations minimizes/reduces gingivitis/keeps gums healthy
- Ultrasound/bubbles/sonic vibrations cleans/stimulates gums
- Ultrasound/bubbles/sonic vibrations improves/intensifies brushing
- Ultrasound/bubbles/sonic vibrations clean fast
- Ultrasound/bubbles/sonic vibrations give a better/deeper cleaning
- Ultrasound/bubbles/sonic vibrations remove plaque/tartar/stains better (sub-subnet)
  - Ultrasound/bubbles/sonic vibrations remove plaque better
  - Ultrasound/bubbles/sonic vibrations whiten teeth/remove stains better
  - Ultrasound/bubbles/sonic vibrations remove tartar better
- Ultrasound/bubbles/sonic vibrations clean faster
- Ultrasound/bubbles/sonic vibrations prevents gingivitis better/keeps teeth/gums healthier

In fact an examination of the actual verbatim shows that, in contrast to Dr. Dupont’s conclusion, many of the respondents did not perceive the ultrasound alone to clean the teeth better. Consider for example the illustrative responses to question 10 on how the Ultreo toothbrush works:

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<sup>6</sup> In contrast to the commonly acceptable practice of having the coding developed and done by independent coders who do not know the objective of the study or its sponsor, in this case Dr. Dupont developed and did the coding by himself. [Dupont deposition p. 104]

- 100005 Ultreo uses ultrasound as well as precise bristle placement to attack plaque in hard to reach places. It infuses ultrasound energy into the bubbles.
- 100006 ultrasonic waves and power head
- 100008 It combines ultrasound wave technology with brushing.
- 100020 The toothbrush uses a combination of vibration and sonic waves to clean teeth.
- 100028 It uses ultrasound waveguide to cleanse your teeth thoroughly and effectively, without harm done to dental work, teeth or gums. The sonic bristles effectively remove plaque within the first minute.
- 100069 It uses ultrasound energy to make little bubbles which help clean your teeth along with the bristles.
- 100124 It uses ultrasound at one end of the brush and the revolving heads to help clean...
- 100190 Uses power brushing plus ultrasound to clean teeth, sounds innovative!
- 100367 It channels ultrasound to the head of the toothbrush and has a coordinated vibration action of the bristles to clean better and deeper.
- 100375 Ultrasound waves and precisely tuned brushes clean better.
- 100437 It uses rotating as well as ultrasound to remove plaque from hard to reach places.
- 300011 It uses ultrasound technology to create bubbles as well as using moving bristles to clean gums and teeth.
- 300032 Uses ultrasound along with bristle cleaning to remove most plaque from hard to reach places.
- 300115 Uses ultrasound waves and micro bristles to naturally whiten and clean teeth.

While some respondents did mention single attributes such as: “ultrasound” (#100044), “by ultrasound waves” (100048), it is important to note that there was no follow-up probe to this question, which would have allowed the respondent to clarify whether they thought that it is ultrasound alone that has the impact or the combination of ultrasound and brushing. [See also paragraph 10 above.] The lack of any follow-up probe is especially critical in this case since the only reference in the ad is to “sonic bristle action” and not to “sonic” by itself, nor to “sonic vibration”, nor to “ultrasonic/ultrasound” (where the latter would have suggested that it is beyond sonic and thus cannot be heard).

13. Inappropriate verification. To assure that the respondents completed the study themselves, it is required, even when using Internet panels, to conduct a follow-up verification study by a third-party research firm, independent of both the research supplier and the sponsor of the research. This was not done in this study and the excuse offered by Dr. Dupont in footnote 2, page 7 of his report is without merit.

14. The conclusions of the study cannot be relied on. The conclusions of the study can't even be accepted for the study respondents (let alone trying to project the results to the relevant U.S. population) since they are tainted by the leading and biased questions and analysis as well as the biased stimulus and lack of a control group.

Dr. Dupont's main conclusion addressed three areas:

(a) Consumer's belief that the ultrasound itself, or the bubbles activated by the ultrasound, are themselves alone able to clean teeth. As discussed in paragraph 13 above, the data coding did not allow for separating the effect of the ultrasound itself. The conclusions in this area are not supported.

(b) Consumer's belief that "a deep feeling clean" is associated with benefits, including therapeutic benefits. These results are purely a function of the leading question and the placement of this question in the questionnaire. The conclusions in this area are not supported.

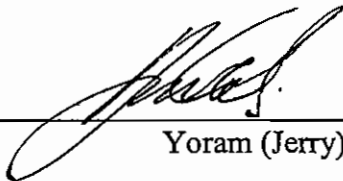
(c) "After seeing the advertising 86% of the respondents said they were very or somewhat interested in buying an Ultreo toothbrush." Yet this response is a function of the placement of the question at the end of a long series of leading and biased questions and without a control group cannot be attributed to ad/website. The conclusions in this area are not supported.

Other topics raised by some respondents, such as the removal of plaque, cannot be relied on given the numerous flaws of the study and especially the biased and leading questions, the lack of appropriate probing, and lack of a control group. This specific topic was not discussed, however, in Dr. Dupont's report.

**V. Summary**

15. Summary. The cumulative effect of all the shortcomings of Dr. Dupont's study (Paragraphs 6-14) prevents one from relying on the results of this study and draw any conclusions on consumers perceptions of and take away from the Ultreo website.

November 29, 2007

  
Yoram (Jerry) Wind



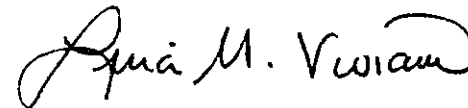
**CERTIFICATE OF SERVICE**

I hereby certify under penalty of perjury that on November 30, 2007, I caused a copy of the foregoing **DECLARATION OF YORAM (JERRY) WIND** to be served upon counsel for The Procter & Gamble Company by the Court's ECF Filing System and by hand delivery to the following individual:

Laura W. Sawyer  
**JONES DAY**  
222 East 41<sup>st</sup> Street  
New York, New York 10017

**Attorneys for The Procter & Gamble Company**

Dated: New York, New York  
November 30, 2007

A handwritten signature in black ink, reading "Lina M. Viviano", written over a horizontal line.

Lina M. Viviano